

line 16, change "sor" to --the-- and change "system in the known prior art" to --means--;
line 17, change "of the" to --and-- and change "communicating and" to
--communicating--;
line 18, change "detecting system" to --sensor--.
Page 25, line 1, change "approaching" to --accessible--.

In the Claims:

Cancel Claims 15-17 in their entirety.

Substitute new claims 38-48 for claims 21-37 on file, as follows:

~~38.~~ A method for counting and measuring particles includes the steps of:

detecting of said particles, intersecting a light beam, by a light detecting means of a particle detecting means of a particle detecting system of a wireless communicating remote detecting system, comprising a wireless communication means of said wireless communicating remote detecting system;

processing of a detected signals by a detected signal processing means of a signal processing system of said wireless communicating remote detecting system;

forming in said signal processing system of said wireless communicating remote detecting system a data, containing an information about a quantity and size of said particles;

converting of said data, containing said information about said quantity and size of said particles, to a form, which is acceptable for a wireless communication of said wireless communicating remote detecting system with a wireless communicating remote data processing and control system;

wireless communicating between said wireless communicating remote detecting system and said wireless communicating remote data processing and control system;

processing of a wireless received signals, characterizing said data containing said information about said quantity and size of said particles , by said wireless communicating remote data processing and control system, including a wireless communication means of said wireless communicating remote data processing and control system.

~~39.~~ The method of claim 38, wherein said wireless communication means of said wireless communicating remote detecting system and said wireless communication means of said wireless communicating remote data processing and control system provide a two-way wireless communication by a transmitting-receiving means of said wireless communication means of said wireless communicating remote detecting system via an aerial means of said wireless communication means of said wireless communicating remote detecting system and by a transmitting-receiving means of said wireless communication means of said wireless communicating remote data processing and control system via an aerial means of said wireless communication means of said wireless communicating remote data processing and control system.

~~40.~~ The method of claim 39, wherein said two-way wireless communication provides a transmitting of a control signals from a wireless communicating remote data processing and control system to a wireless communicating remote detecting system, a receiving of said

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control signals by said wireless communicating remote detecting system, a transmitting of a data, containing an information about particle quantity and size, from said wireless communicating remote detecting system to said wireless communicating remote data processing and control system and receiving of said data by said wireless communicating remote data processing and control system.

41. An apparatus for particle counting and measuring, providing a detection of said particles, intersecting a light beam, a processing of a detected signals, forming in a signal processing system a data, containing an information about a quantity and size of said particles, a conversion of said data, containing said information about said quantity and size of said particles, to a form, which is acceptable for a wireless communication, a processing of a wireless received signals, characterizing said data containing said information about said quantity and size of said particles, includes:

at least one of a plurality of wireless communicating remote detecting systems, each of which comprises a wireless communication means, including a transmitting-receiving means, comprising a transmitting means and a receiving means, an aerial means connected to said transmitting-receiving means, and a particle detecting system, including a particle detecting means, connected to a signal processing system, which is connected to a conversion system connected to said transmitting-receiving means of said wireless communication means;

at least one of a plurality of wireless communicating remote data processing and control systems, each of which comprises a wireless communication means, including a transmitting-receiving means, comprising a transmitting means and a receiving means, an aerial means connected to said transmitting-receiving means, and a microprocessor system, including a terminal means, a conversion means, converting a control signals to a form, which is acceptable for a wireless communicating means for a wireless communication of said at least one of said plurality of wireless communicating remote data processing and control system with said at least one of said plurality of wireless communicating remote detecting systems, and converting a received from said at least one of said plurality of wireless communicating remote detecting systems data to a digital form, which is acceptable for processing by said microprocessor system, and a microprocessor means, which are connected to each other.

42. The apparatus of claim 41, wherein each appropriate said terminal means of an appropriate said microprocessor system of an appropriate wireless communicating remote data processing and control system of said plurality of wireless communicating remote data processing and control systems includes at least one of: an appropriate displaying means, an appropriate floppy disk means, an appropriate compact disk means, an appropriate printing means and an appropriate control panel connected to each other.

43. The apparatus of claim 41, wherein each appropriate said conversion means of an appropriate said microprocessor system of an appropriate wireless communicating remote data processing and control system of said plurality of wireless communicating remote data processing and control systems is connected to an appropriate said transmitting-receiving means of an appropriate said wireless communication means of said appropriate microprocessor system of said appropriate wireless communicating remote data processing and control system.

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